

CLAIMS

Amend the claims as follows.

1. (Currently amended) A device comprising:

a Digital Signal Processor (DSP) module enabled to receive an analog telephone signal to convert the analog telephone signal to a digital signal and further to packetize the digital telephone signal for transmission to a remotely-located device, the device and the remotely-located device enabled to negotiate a codec by ~~simultaneously each~~ sending to ~~each the~~ other a list of one or more types of codecs that each supports and to select each deciding to use a mutually supported codec with through the use of a predetermined protocol and during communications between the remotely-located device and the DSP module, the DSP module enabled to renegotiate the use of a second type of codec and switch to using the second codec upon detection of signal degradation based on statistics from the DSP module,

wherein, the type of codec being utilized may be repeatedly, mutually, renegotiated to dynamically change compression techniques and switching between the codecs is performed during a call.

2. (Previously Presented) A device as recited in claim 1 wherein switching between the codecs is initiated by a user of one of the telephone devices.

3. (Previously Presented) A device as recited in claim 2 wherein a predetermined code is assigned to correspond to each codec wherein the user specifies the type of codec to be switched to by entering the predetermined code corresponding to a desired codec.

4. (Previously Presented) A device as recited in claim 3 wherein the predetermined code is programmably-alterable.

5. (Currently amended) A device as recited in claim 1 further comprising the device enabled to switch from a codec resulting in the use of larger packet sizes to a codec resulting in smaller packet sizes in response to detecting a lower available bandwidth on a packet switching network.

6. (Currently amended) A device as recited in claim 5 wherein the device is configured to ~~for~~ automatically detecting the lower bandwidth.

7. (Currently amended) A device as recited in claim 1 wherein upon detecting higher bandwidth available on packet switching network, the device ~~for~~ is enabled to switching from a codec resulting in the use of smaller packet sizes to a codec resulting in higher packet sizes.

8. (Currently amended) A device as recited in claim 5 wherein the device ~~for~~ is enabled to automatically detecting the higher bandwidth.

9. (Currently amended) A device as recited in claim 1 wherein the remotely-located device is enabled to ~~detects~~ detect the degradation in the quality of the voice information.

10. (Previously Presented) A device as recited in claim 1 wherein the degradation in the quality of the voice information is due to loss of one or more packets.

11. (Currently amended) A device as recited in claim 10 wherein a threshold defines the number of lost packets that are tolerated and the device is enabled to ~~triggering~~ trigger a decision to switch to the second type of codec.

12. (Previously Presented) A device as recited in claim 11 wherein a plurality of packets form a message and each packet includes a sequence number indicative of the position of the packet with respect to other packets in the same message, the sequence numbers of the same message being in sequential order wherein a loss of packets is detected when one or more sequence numbers are missing from the received packets of the same message.

13. (Previously Presented) A device as recited in claim 1 wherein the degradation in the quality of the voice information is due to an intolerable delay associated with the time for a packet to travel between the device and the remotely located device.

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17. (Currently amended) A method comprising:

- receiving at a first router an analog telephone signal through a telephone connection from a first telephone device;
- converting the analog telephone signal to a digital telephone signal;
- separating information carried on the digital telephone signal into packets of information;
- initially, mutually, negotiating with a second router a first type of codec for communication with a second telephone device, by ~~simultaneously~~ each sending to ~~each~~ the other one or more types of codecs that each supports and each deciding to use a mutually supported codec through the use of a predetermined protocol;
- using a first type of codec for transferring the packets of information between the ~~two telephone devices~~ first and second router through a packet switching network;
- during communication between the telephone devices, the first and second router renegotiating the use of a second type of codec;
- switching to using the second type of codec upon detection of degradation in the quality of the voice information during the course of the telephone connection; and
- during communication between the telephone devices, upon further detection of signal degradation, repeatedly renegotiating to dynamically change compression.

18. (Previously Presented) A device as recited in claim 1 wherein the codec negotiation is performed pursuant to the H.245 protocol.

19. (Currently amended) A device as recited in claim 1 wherein the first type of codec ~~utilizes~~ includes a compression/decompression algorithm defined by any one of the standards: G.711, G726, G729 or G723.1 and the second type of codec utilizes a compression/decompression algorithm defined by any one of the standards: G.711, G726, G729 or G723.1.

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